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## **CLAIMS**

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1. A multi-layer double-sided wiring board comprising: an insulating layer having an opening formed therein;

a first conductive layer formed on an upper surface of the insulating layer;

a second conductive layer formed on a lower surface of the insulating layer and covering an inside wall of the opening and a portion of the first conductive layer which is exposed in the opening; and

an interface layer interposed between the insulating layer and the first and second conductive layers, wherein

the second conductive layer directly contacts the first conductive layer in the opening without the interface layer being interposed therebetween.

2. A multi-layer double-sided wiring board according to claim 1, wherein the second conductive layer directly contacts the insulating layer at the inside wall of the opening without the interface layer being interposed therebetween.

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- 3. A multi-layer double-sided wiring board according to claim 1 or 2, wherein the interface layer contains at least one metallic element selected from the group consisting of nickel, cobalt, zinc, and chromium.
- 4. A method of fabricating a multi-layer double-sided wiring board, comprising the steps of:

selectively removing a portion of an insulating layer on an upper surface of which is formed a conductive layer, and thereby forming in the insulating layer an opening whose upper end is closed with the conductive layer;

forming an interface layer over an entire lower surface;

selectively removing at least a portion of the interface layer which contacts the first conductive layer; and

forming a conductive layer over the entire lower surface.

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5. A method of fabricating a multi-layer double-sided wiring board, comprising the steps of:

forming an opening pattern by selectively removing a portion of a conductive layer formed on a lower surface of an insulating layer with an interface layer interposed therebetween, the insulating layer also having a conductive layer formed on an upper surface thereof with an interface layer interposed therebetween;

selectively removing a portion of the insulating layer as well as a portion of the interface layers by using, as a mask, the lower conductive layer whose portion has been removed, and thereby forming in the insulating layer an opening whose upper end is closed with the upper conductive layer; and

forming a conductive layer over the entire lower surface including a side wall of the opening and a portion of the upper conductive layer which is exposed in the opening.